6. The random variable $H \sim N(\mu, 6^2)$

The mean of a random sample of n observations of H is denoted by $\bar{H}$

Given that $P(\bar{H} < 55.08) = 0.1151$ and $P(\bar{H} > 56.976) = 0.0250$ using the tables provided

(a) show that $n = 100$

(6)

(b) hence, find the value of μ

(2)

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Question 6 continued

(Total for Question 6 is 8 marks)